



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,888	04/16/2001	Robert Jan Jonker	ACH2784US	4552

7590 04/05/2004

Louis A. Morris
Akzo Nobel Inc.
7 Livingstone Avenue
Dobbs Ferry, NY 10522-3408

EXAMINER

QUAN, ELIZABETH S

ART UNIT	PAPER NUMBER
----------	--------------

1743

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,888

Applicant(s)

JONKER, ROBERT JAN

Examiner

Elizabeth Quan

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-11 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/16/2001 & 1/6/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Election/Restrictions***

1. Applicant's election with traverse of group II as reflected in Office Action mailed 7/2/2003 is acknowledged. The traversal is on the ground(s) that: (i) Claim 9, as amended, does recite all particulars of the apparatus, including the conveyor, (ii) The process as claimed could not be practiced by hand because, if for no other reason, claim 9 requires use of an apparatus, and (iii) The process can be practiced by an apparatus comprising the required elements of claim 9, and claims 1-7 comprise such an apparatus. This is not found persuasive because only one-way distinction needs to be shown between method and apparatus by **EITHER** the process as claimed can be practiced by another materially different apparatus or by hand **OR** the apparatus as claimed can be used to practice another and materially different process. In the current claims, distinction can still be shown since the apparatus as claimed can be used to practice another and materially different process, such as synthesizing chemicals. U.S. Patent No. 4,221,568 to Boettger, which includes the limitations of the apparatus, practices another and materially different process since different process steps are disclosed that are not recited in the instant method claim.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the reactor tubes, holder for a tube, magazine for additional tubes, and automated desorption unit must be shown or the feature(s) canceled from the claim(s). It is not sufficient to draw three lines to indicate the reactor tubes

Art Unit: 1743

(6a), an arrow to indicate the conveyor (6b), and a box around the reactor to indicate the holder.

Applicant states that Fig. 1 shows via a dotted line around the flow module that comprises the improvement to the remainder of the apparatus that comprises an old machine, such as an automated thermal desorption unit. However, there is nothing labeled as "old machine" or "automated thermal desorption unit" within the dotted line. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,536,452 to Norton et al. in view of U.S. Patent No. 4,221,568 to Boettger or U.S. Patent No. 4,976,924 to McAndless et al. and U.S. Patent No. 6,063,633 to Willson, III.

Art Unit: 1743

Norton et al. disclose a method of testing a plurality of a solid material contained in a reactor tube (14) by means of an apparatus (fig. 1). The apparatus comprises a holder (13) for a tube and flow module for generating a carrier fluid flow containing a probe comprising a chemical agent for testing the solid material in which the probe or additional carrier fluid is injected into the carrier fluid flow relatively close to the holder (fig. 1; col. 2, lines 4-32).

One of the tubes may contain a sensing element, such as a thermocouple (col. 3, lines 50-52). Other tubes are preferably provided with a porous retaining plug and a small piece of stainless steel gauze to hold the samples within the tubes (col. 3, lines 52-55). Tubes that are not in use are preferably plugged with glass wool in order to prevent the passage of convection currents of gas through the tubes (col. 3, lines 55-57). Norton et al. disclose that the reactor apparatus may be used for determining or comparing physical or chemical properties of materials or processes, suggesting that the reactor may be used for different purposes (col. 1, lines 15-20). Alternatively, the reactor tubes may be filled with various types of packing (15) for a testing of packing efficiency. This demonstrates that the reactor may be used in a variety of tests including testing of solid material. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the apparatus in testing solid material, such as packing materials to determine their efficiency as taught by Norton et al. or catalysts to determine their efficacy as taught by Willson, III.

Norton et al. fail to disclose a magazine for additional tubes, placing the tube in the holder, and replacing the tube with an additional tube from the magazine via a conveyor. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the steps of placing tubes into the holder and replacing the tubes

Art Unit: 1743

with clean tubes from the magazine via a conveyor in the method of Norton et al. for high-throughput as taught by each of Boettger or McAndless et al.

The system of Norton et al. is considered to make up an automated thermal desorption unit since the oven assembly (10) includes the reactor oven (11), which includes the holder (13) holding tubes (14) and analysis column oven (12) (fig. 1). Heated gas flushes the injected liquid throughout the system, from the reactor tube to the analysis column oven and from the analysis column oven to the detector (26) (col. 2, lines 4-39). One would expect that particles absorbed onto the analysis column oven would be desorbed on its way to the detector. Furthermore, McAndless et al. disclose an automated thermal desorption unit that accomplishes the steps of placing a tube in the holder and replacing the tube with an additional tube from the magazine via a conveyor. In McAndless et al.'s BACKGROUND OF THE INVENTION, a method of thermal desorption is described in which air removes contaminants that are injected into a gas chromatograph and material is heated to desorb the contaminants from the gas chromatograph for analysis. In any event, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the system participate in a thermal desorption process to characterize the system as an automated thermal desorption unit as necessary or desired in dealing with a multi-component sample in which only a single component is of interest and absorbed onto the solid material to test the efficiency or efficacy of the solid material to a certain single component.

Response to Arguments

6. Applicant's arguments with respect to claims 9-11 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 1743

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Quan whose telephone number is (571) 272-1261. The examiner can normally be reached on M-F (8:00-4:30).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elizabeth Quan
Examiner
Art Unit 1743

eq


Jill Warden
Supervisory Patent Examiner
Technology Center 1700